

PTO/SB/21 (08-03)

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Receipt

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)		Application Number	09/807,047
		Filing Date	June 25, 2002
		First Named Inventor	Jerry PELLETIER
		Art Unit	1634
		Examiner Name	F. Lu
Total Number of Pages in This Submission	8	Attorney Docket Number	514012000100

**ENCLOSURES (Check all that apply)**

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1. Request for Corrected Filing Receipt (2 pages) 2. Marked up copy of Filing Receipt (2 pages) 3. Application Data Sheet (2 pages) 4. Copy of first page of PCT Publication WO 00/20630 (1 page) 5. Return receipt postcard
<b>Remarks</b>		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	MORRISON & FOERSTER LLP Kimberly A. Bolin - 44,546 for Gladys H. Monroy - 32,430	CUSTOMER NUMBER: 25226
Signature		
Date	March 9, 2004	

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Filing Receipt Corrections, Office of Initial Patent Examination, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: MARCH 9, 2004Signature: Denise M. Lade (Denise M. Lade)

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Filing Receipt Corrections, Office of Initial Patent Examination, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 3/9/04

Signature: Denise M. Lade  
(Denise M. Lade)

Docket No.: 514012000100  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In Patent Application of:  
Erry PELLETIER et al.

Application No.: 09/807,047

Confirmation No.: 2183

Filed: June 25, 2002

Art Unit: 1634

For: OLIGONUCLEOTIDE PRIMERS THAT  
DESTABILIZE NON-SPECIFIC DUPLEX  
FORMATION AND USES THEREOF

Examiner: F. Lu

**REQUEST FOR CORRECTED FILING RECEIPT**

Filing Receipt Corrections  
Office of Initial Patent Examination  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Applicant hereby requests that a corrected Filing Receipt be issued in the above-identified patent application. The corrections to be made to the Filing Receipt are as follows:

1. In Atty Docket No. field, please delete "Goudreau" and insert --514012000100--;
2. In Applicant(s) field, please delete "QC" and insert --Quebec--;
3. In Applicant(s) field, second line, before Quebec, please insert --Montreal,--; and
4. In Domestic Priority data as claimed by applicant, please delete "11/06/1999" and insert --10/06/1999--.

Applicants enclose an initial Application Data Sheet reflecting updated Atty Docket No, address of inventors, and correct International Filing Date; copies of the marked-up Filing Receipt and a copy of the first page of PCT Publication WO 00/20630 (PCT/CA99/00933) showing the date of October 6, 1999 as the International Filing Date and October 7, 1998 as the Priority Date Claimed.

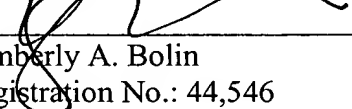
Applicant additionally requests that all pertinent U.S. Patent and Trademark Office records relating to the subject application be changed to reflect this correction.

Applicants inadvertently listed an incorrect International Filing Date and Priority Date Claimed on the initial Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) Concerning a Filing Under 35 U.S.C. § 371 April 6, 2001. The correct dates should be OCTOBER 6, 1999 and OCTOBER 7, 1998, respectively. The typographical error is obvious due to the fact that the International Application Published under the Patent Cooperation Treaty clearly states the dates above. This error should not affect the filing in any way.

In the unlikely event that the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing 514012000100. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: March 9, 2004

Respectfully submitted,

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## UNITED STATES PATENT AND TRADEMARK OFFICE

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UNITED STATES PATENT AND TRADEMARK OFFICE  
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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/807,047	06/25/2002	1645	999	Goudreau 514012000100	8	36	12

CONFIRMATION NO. 2183

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**COPY RECEIVED**  
SEP 24 2002  
MORRISON & FOERSTER, LLP

## FILING RECEIPT



\*OC00000008797371\*

Date Mailed: 09/17/2002

Receipt is acknowledged of this nonprovisional Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

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## Domestic Priority data as claimed by applicant

10/06/1999

THIS APPLICATION IS A 371 OF PCT/CA99/00933 ~~11/06/1999~~

## Foreign Applications

CANADA 2,246,623 10/07/1998

Projected Publication Date: Not Applicable, filed prior to November 29, 2000

Non-Publication Request: No

Early Publication Request: No

\*\* SMALL ENTITY \*\*

## Title

Oligonucleotide primers that destabilize non-specific duplex formation and uses thereof

## Preliminary Class

DOCKETED

*MC* *Ta*

435



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**Title 35, United States Code, Section 184**  
**Title 37, Code of Federal Regulations, 5.11 & 5.15**

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**NOT GRANTED**

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## **Application Data Sheet**

### **Application Information**

Application Type::	Regular
Subject Matter::	Utility
Suggested Group Art Unit::	1634
CD-ROM or CD-R?::	None
Sequence submission?::	None
Computer Readable Form (CRF)?::	No
Title::	OLIGONUCLEOTIDE PRIMERS THAT DESTABILIZE NON-SPECIFIC DUPLEX FORMATION AND USES THEREOF
Attorney Docket Number::	514012000100
Request for Early Publication?::	No
Request for Non-Publication?::	No
Suggested Drawing Figure::	2
Total Drawing Sheets::	8
Small Entity?::	No
Petition included?::	No
Secrecy Order in Parent Appl.?::	No

### **Applicant Information**

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**Representative Information**

Representative Customer Number:: 25226

**Domestic Priority Information**

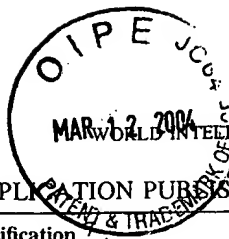
Application::	Continuity Type::	Parent Application::	Parent Filing Date::
This Application	National Phase of	PCT/CA99/00933	10/6/99

**Foreign Priority Information**

Country::	Application number::	FilingDate::	Priority Claimed::
Canada	2,246,623	10/7/98	Yes

COPY

PCT

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International Bureau

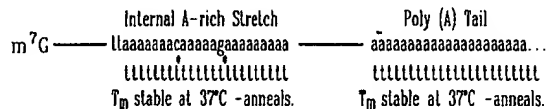
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification C12Q 1/68	A1	(11) International Publication Number: WO 00/20630 (43) International Publication Date: 13 April 2000 (13.04.00)
(21) International Application Number: PCT/CA99/00933 (22) International Filing Date: 6 October 1999 (06.10.99) (30) Priority Data: 2,246,623 7 October 1998 (07.10.98) CA (71) Applicant (for all designated States except US): MCGILL UNIVERSITY [CA/CA]; 3550 University Street, Montreal, Quebec H3A 2A7 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): PELLÉTIÉ, Jerry [CA/CA]; 8 Lakeview, Baie D'Urfée, Quebec H9X 3B1 (CA). DAS, Manjula [IN/CA]; Apartment #205, 3484 Stanley, Montreal, Quebec H3A 1S1 (CA). (74) Agents: DUBUC, Jean et al.; Goudreau Gage Dubuc & Martineau Walker, The Stock Exchange Tower, Suite 3400, 800 Place Victoria, P.O. Box 242, Montreal, Quebec H4Z 1E9 (CA).	(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	

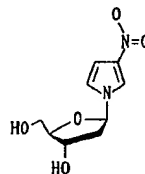
(54) Title: OLIGONUCLEOTIDE PRIMERS THAT DESTABILIZE NON-SPECIFIC DUPLEX FORMATION AND USES THEREOF

## (57) Abstract

The present invention relates to the demonstration that a modification of a homopolymeric stretch in an oligonucleotide, or primer, improves the discrimination for binding of such a modified oligonucleotide or primer to its complementary homopolymeric target sequence, as compared to a non-homopolymeric sequence. More specifically, an oligo d(T) primer having two of the thymine bases substituted by 3-nitropyrrrole were used in a poly A primed cDNA synthesis experiment to demonstrate an improvement in discrimination between the priming of cDNA synthesis from *bona fide* poly A sequence as compared to internal A-rich sequences. The present invention relates to modifications of homopolymeric sequences in oligos, decreasing the ridging bonding capacity, in general, since other modifications, such as an oligo d(T) primer substituted with 2' deoxyinosine was also shown to improve the discrimination between the binding to a *bona fide* poly A tail as compared to A-rich sequences. The present invention thus relates to universal primers which reduce mispriming during cDNA library construction, thereby increasing the proportion of cDNA clones having been primed from the *bona fide* 3' poly A tail. The present invention further relates to the use of the discriminating oligonucleotides of the present invention in other methods such as mRNA purification, PCR-based detection methods and sequencing.



A

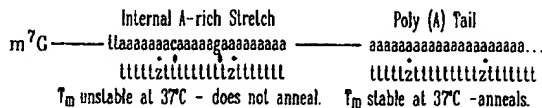


Z = 1-(2'-Deoxy-β-D-Ribofuranosyl)-  
3-Nitropyrrrole

B

Oligo d(T)-Z Primer: 5'-d(T)<sub>7</sub>-Z-d(T)<sub>9</sub>-Z-d(T)<sub>5</sub>-3'

C



D